

SYSTEMS AND METHODS FOR CLOSE COUPLED COOLING

ABSTRACT OF THE DISCLOSURE

Systems and methods for close coupled cooling of electrical system components
5 such as computer systems are disclosed. The system may include a structure defining
spaces each having an inlet and an outlet and being otherwise generally enclosed in
which the electronic components are mounted, a heat exchanger either adjoining the
structure at the inlets of the spaces or disposed within the spaces at the inlets and
configured to channel a heat exchange fluid to cool air as air flows therethrough, a fan
10 disposed in each space to pull air through the inlet via the heat exchanger, to direct air
past the electronic components mounted therein to cool the electronic components, and to
exhaust the air through the outlet, and a cooling module located remote to the spaces and
in fluid communication with the heat exchanger for cooling the heat exchange fluid. The
system may include rack mount computer system structures.